

**Notice of Allowability**

Application No.

10/090,863

Applicant(s)

VAN DER SCHAAR, MIHAELA

Examiner

Erick Rekstad

Art Unit

2613

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to December 15, 2004.
2. ☒ The allowed claim(s) is/are 1-21.
3. ☒ The drawings filed on 26 July 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_



CHRIS KELLEY

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2000

### **DETAILED ACTION**

This is an Allowance for application no. 10/090863 in response to the amendment filed on December 15, 2004 in which claims 1-21 are presented for examination.

#### ***Allowable Subject Matter***

Claims 1-21 are allowed.

The following is an examiner's statement of reasons for allowance:

The claims pertain to a novel method and apparatuses for coding and decoding video that the examiner was unable to find in several prior art searches.

As shown in Figure 1, 'Macroblock-based Progressive Fine Granularity Scalable (PFGS) Video Coding with Flexible Temporal-SNR Scalabilities' to Sun et al. teaches a method of coding video, comprising the steps of:

- coding the video into a data-stream of base layer frames ;
- computing residual image frames in a transform domain from the base layer frames;
- constructing extended base layer reference frames from the base layer frames and at least portions of the residual image frames (Page 1026, Column 1 First Paragraph);
- motion-compensating the extended base layer reference frames to produce motion-compensated extended base layer reference frames (Page 1026, Column 1 Last Paragraph);

predicting motion-compensated residual image frames from the motion-compensated extended base layer reference frames and the video (Page 1026, Column 1 Last Paragraph);

and fine granular scalable coding the motion-compensated residual image frames into a data-stream of temporal frames (Abstract, Pages 1026-1027 and Figures 1-3; Note: Equation (2) is used to determine the motion compensation).

Sun does not teach the "coding the residual image frames into a data-stream of SNR quality frames" and then "constructing extended base layer reference frames, each of the extended base layer reference frames constructed from one of the base layer frames and at least a portion of one of the SNR quality frames" as required by the amended claims and depicted in the applicant's Figure 3B. These features taken with the others in the claims define over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent Application Publication 2003/0118096 to Ishtiaq et al.

US Patent 6,639,943 to Radha et al.

US Patent 6,580,754 to Wan et al.


'Motion-Compensation Fine-Granular-Scalability (MC-FCS) for Wireless Multimedia' M. van der Schaar et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick Rekstad whose telephone number is 571-272-7338. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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